

June 9, 2010

Carl Bauer, Chairman, CCS Review Panel  
California Energy Commission  
Energy Research & Development division  
Public Interest Energy Research Program  
1516 Ninth Street, MS 43  
Sacramento, CA 95814

Subject: Comments relating to the June 2, 2010 Meeting of the  
California Carbon Capture and Storage Review Panel

Dear Carl:

Southern California Edison (SCE) is pleased to provide comments relating to the June 2, 2010 meeting of the California Carbon Capture and Storage (CCS) Review Panel.

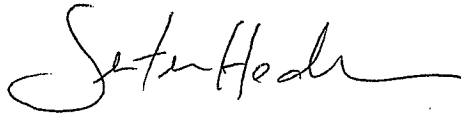
In his presentation on June 2, Mark Nelson of SCE provided information on several important issues relating to the type of generation needed for California in the future as well as the potential financial impact of CCS technology. Consideration of these points is requested to be included in the deliberations and recommendations made by the Review Panel.

1. Technology: Research in CCS technology is currently focused on steady state operations akin to baseload technology. In contrast, in the future California will most likely be focused on quick start, fast ramping technologies with a wider operating range. It is recommended that the panel encourage research in CCS technology that can better accommodate California's future needs.
2. Vulnerabilities: Risk and long term liability of CO<sub>2</sub> injection operations remain important issues to be understood and addressed. Added plant costs associated with insurance and risk mitigation are expected to be included in future project estimates which will most likely manifest into a higher cost of electricity. It will be important to understand, monetize and equitably distribute the cost and risk.
3. Costs: Early indication is that the cost of electricity for CCS technology is above the costs associated with standard generation such as natural gas plants. Some offset may be realized by developers who take advantage of proposed Federal legislation such as Waxman/Markey and Kerry-Lieberman since each of these proposed bills provides \$/ton incentives for early movers. Future carbon credit accrual to electricity buyers is also a potential mechanism to offset the higher cost of electricity. Timeliness and the ability to offset high costs to buyers may become important drivers to consider as they can affect CCS development in California.

4. Financing: The magnitude of capital investment of CCS technology based plants may exceed the ability of developers to invest without assistance. For example, the 618 MW Edwardsport IGCC plant is currently forecast at \$2.8B without CCS. Few industries or companies have the capacity for this magnitude of an investment, or the ability to support investment above market cost. A method for equitable spread of these costs will need to be identified as benefiting customers seem to exceed any one utility, state or perhaps even country.

Your consideration of SCE's comments on this important issue are appreciated. Please contact me at 626-302-8329 or at [jenifer.hedrick@sce.com](mailto:jenifer.hedrick@sce.com) should you have any questions on this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jenifer Hedrick", with a stylized, flowing script.

Jenifer Hedrick  
Project Manager  
Generation Planning and Strategy

cc: Mark Nelson  
Paul Klapka